C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.124.a.2 ATF Critical Device - 2 Tests

OPM Procedures in which this Attachment is used.		
4.120.124		

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____*Signature on File*_____ _____
Physics Department Chair   Date

V. Castillo

4.120.124.a.2 ATF Critical Device Tests

<div align="center">

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

</div>

Division A Software Filename and Checksum: Title:_____ **Checksum:** _____

Division B Software Filename and Checksum: Title:_____ **Checksum:** _____

<hr>

Initial testing complete:

Test Team Leader's Name (Print): _____ **Life Number:** _____

Test Team Leader's Name (Sign): _____ **Date: _____/_____/_____**

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ **Life Number:**_____

Test Team Leader's Name (Sign): _____ **Date: _____/_____/_____**

Test results reviewed by:

Safety Section Head's Name (Print):_____ **Life Number:** _____

Safety Section Head's Name (Sign):_____ **Date: _____/_____/_____**

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print):_____ **Life Number:** _____

 RSC Member's Name (Sign):_____ **Date: _____/_____/_____**

NOTE

All ATF Control Room (ACR) observations are on the MAIN page of the Panel View except when referred to the Details Page.

1.1   Test of the ATF Chicane Magnet in the OFF state and Not OFF fault for < and > 10 secs respectively.

	SET	Chicane Mode Selector Key **(CMSK)** at **ATF** Control Room **(ACR)** to **OFF**	
☐	**VERIFY**	**CMSK** is set to	**OFF**
☐	**VERIFY**	On Details Page **ACR** sees **Key SW Off**: Div A ☐ and Div B ☐	**ON (Green)**
☐	**VERIFY**	Chicane Main Power Supply (CMPS) is	**OFF**
☐	**VERIFY**	**ACR** sees voltages for Chicane Magnet **(CM) 1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	Primary ATF Critical Device **(CDEV_1)** [Laser shutter] is	**OUT**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	ATF Reachback Critical Device **(RHK_DV1)** [Modulator 1]☐ and **RHK_DV2** [Modulator2]☐ are	**OFF**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Not Off fault**	**OK (Blk)**
	AT	**Encl 5805,** ACS Chicane Magnet Readback Amplifiers **(ACMRA),** follow **Push-button** Tests in **Tables 1thru 3** below	

P&H for <10 secs Div A P/B	Verify during P&H, for Div A, voltage for				Verify for Div A Not Off Fault OK (blue)	Verify			Verify Audible Alarm OFF
	CM1 >0.5V	**CM2 >0.5V**	**CM3 >0.5V**	**CM4 >0.5V**		**Cdev_1 Enab OUT**	**Rhk_Dv1 Enab OFF**	**Rhk_Dv2 Enab OFF**	
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐

Table –1 Div A Test of Response to Not OFF Magnet voltage fault for <10 secs.

P&H Div B P/B for > 10secs	Verify during P&H, for Div B, voltage for				Verify for Div B Not Off Fault (Red)	Verify on Detls pge						Verify Alarm OFF	Cont'd on Table 3
	CM1 >0.5V	CM2 >0.5V	CM3 >0.5V	CM4 >0.5V		Cdev_1		Rhk_Dv1 Enab Off		Rhk_Dv2 Enab Off			
						Div A Enab In	Div B Disab In	Div A	Div B	Div A	Div B		
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Table–2 Div B Test of Response to Not OFF Magnet voltage fault for >10 secs.

Clear Not Off fault with RHF	Verify voltage for Div B				Verify for Div B Not Off OK	Verify on Detls pge						Verify Alarm OFF	Go to next switch in Table 2
	CM1 0 ± .5V	CM2 0 ± .5V	CM3 0 ± .5V	CM4 0 ± .5V		Cdev_1		Rhk_Dv1 Enab Off		Rhk_Dv2 Enab Off			
						Div A Enab Out	Div B Enab Out	Div A	Div B	Div A	Div B		
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	☐	End of Test

Table–3 Continuation of Div B Test of Response to Not Off Magnet voltage fault for >10 secs.

☐ **Check for acceptance of Test of the ATF Chicane Magnet in the OFF State and Not OFF Magnet Voltage fault for < and > 10 secs respectively.**

1.2 Test of Div A Power-up

☐	**VERIFY**	**CMSK** is set to	**OFF**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for **CM1** ☐**, CM2** ☐**, CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **>10% fault**	**OK**
	Turn OFF	**AC Power** to **Div A Field Rack PLC**	
☐	**VERIFY**	**AC Power** to **Div A Field Rack PLC** is	**TURNED OFF**
	WAIT	**30 Secs**	
	Turn ON	**AC Power** to **Div A Field Rack PLC**	
☐	**VERIFY**	**AC Power** to **Div A Field Rack PLC** is	**TURNED ON**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**A<>B**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**A<>B**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **silence** Alarm	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1:** Div **A**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1:** Div **B**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault:** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault:** Div **B**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **B**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **A**	**Ng Cmms**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **B**	**OK**
☐	**VERIFY**	**Attempt** to **clear** R I/O fault with **RHF**	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **clear** Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐   **Check for acceptance of Test of Div A Power-up**

1.3   Test of Div B Ng RI/O with the ATF Chicane Magnet in the OFF state.

	VERIFY	**CMSK** is set to	**OFF**
☐	VERIFY	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐	**ON**
☐	VERIFY	**ACR** sees voltages for **CM1** ☐**, CM2** ☐**, CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	VERIFY	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	VERIFY	**ACR** sees **Reachback**	**OK**
	REMOVE	**RI/O** from **Div B** Field rack **Module 7**	
☐	VERIFY	**ACR** sees **CDEV_1**	**A<>B**
☐	VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**A<>B**
☐	VERIFY	**ACR** sees **Reachback** Div **B**	**nd**
☐	VERIFY	**Audio Alarm**	**ON**
☐	VERIFY	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	VERIFY	**Attempt** to **Reset** RI/O **fault** with Reset H/Ware Fault (**RHF**)	**UNSUCCESSFUL**
	REPLACE	**RI/O** from **Div B** Field rack **Module 7**	
☐	VERIFY	**ACR** sees on **Detls** pge **RI/O Fault,** Div **B**	**Fault**
☐	VERIFY	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	VERIFY	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**
☐	VERIFY	**ACR** sees on **Detls** pge **CDEV_1,** Div **A**	**Enabled IN**
☐	VERIFY	**ACR** sees on **Detls** pge **CDEV_1,** Div **B**	**Disabled IN**
☐	VERIFY	**ACR** sees on **Detls** pge **Div B** Cmms	**Ng Cmms**
☐	VERIFY	**ACR** sees on **Detls** pge **Reachback** Div **B**	**Fault**
☐	VERIFY	**Attempt** to **Reset** Reachback	**UNSUCCESSFUL**
☐	VERIFY	**Attempt** to **Reset** RI/O **fault** with **RHF**	**SUCCESSFUL**
☐	VERIFY	**ACR** sees on **Detls** pge **RI/O Fault**	**OK**
☐	VERIFY	**ACR** sees on **Detls** pge **Cmms:** Div **A** ☐ and Div **B** ☐	**OK**
☐	VERIFY	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
☐	VERIFY	**ACR** sees on **Detls** pge **Reachback:** Div **A** ☐ and Div **B** ☐	**OK**
☐	VERIFY	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div B Ng RI/O with the ATF Chicane Magnet in the OFF state.**

1.4 Test of Div A Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the OFF state.

☐	VERIFY	**CMSK** is set to	**OFF**
☐	VERIFY	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐	**ON**
☐	VERIFY	**ACR** sees voltages for: **CM1** ☐**, CM2** ☐**, CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	VERIFY	**ACR** sees **CDEV_1**	**Enabled OUT**

☐ VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are		**Enabled OFF**
☐ VERIFY	**ACR** sees **Reachback**		**OK**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐		**Enabled OUT**
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**		**Enabled OFF**
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**		**Enabled OFF**
P&H	At **encl 5805, ACMRA,** Div **A** S1 for **>10 secs**		
☐ VERIFY	**ACR** sees on Detls pge **Not Off Fault,** Div **A**		**FAULT**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **A**		**Disabled IN**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **B**		**Enabled IN**
P&H	At **encl 5806, CIB,** Div **A** Laser Shutter **Test** button for **> 2secs**		
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**		**Disabled OFF**
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**		**Enabled OFF**
☐ VERIFY	**ACR** sees **Reachback** Div **A**		**Fault**
☐ VERIFY	**Audio Alarm** is		**OFF**
☐ VERIFY	**Attempt** to **Reset** Not Off fault with **RHF**		**SUCCESSFUL**
☐ VERIFY	**Attempt** to **Reset** Reachback		**SUCCESSFUL**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐		**Enabled OUT**
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**		**Enabled OFF**
☐ VERIFY	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**		**Enabled OFF**
☐ VERIFY	**ACR** sees **CDEV_1**		**Enabled OUT**
☐ VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are		**Enabled OFF**

☐ **Check for acceptance of Test of Div A Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the OFF state.**

1.5   Test of Div A Incorrect Reachback Critical Device 1 Response with the ATF Chicane Magnet in the OFF state.

☐ VERIFY	**CMSK** is set to		**OFF**
☐ VERIFY	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐		**ON**
☐ VERIFY	**ACR** sees voltages **CM 1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are		**0 ± .5 V**
☐ VERIFY	**ACR** sees **CDEV_1**		**Enabled OUT**
☐ VERIFY	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are		**Enabled OFF**
☐ VERIFY	**ACR** sees **Reachback**		**OK**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐		**Enabled OUT**
P&H	At **encl 5805, ACMRA,** Div **A** S2 for **>10 secs**		
☐ VERIFY	**ACR** sees on Detls pge **Not Off Fault,** Div **A**		**FAULT**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **A**		**Disabled IN**
☐ VERIFY	**ACR** sees on Detls pge **CDEV_1:** Div **B**		**Enabled IN**
PRESS	At **encl 5806, CIB,** Div **A** Lsr Shtr **Test** button, till **Reachback**		
PRESS	At **encl 5806, CIB,** Div **A Mod** 1 **Test** button till **Bad** reachback		

☐	**VERIFY**	**ACR** sees on Detls pge **Reachback** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **Bad Reachback** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** Reachback and Bad Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge: **Reachback** ☐ and **Bad Reachback** ☐	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**Attempt** to **Reset** Not Off **Fault**	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge **Not Off** Fault	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div A Incorrect Reachback Critical Device 1 Response with the ATF Chicane Magnet in the OFF state.**

1.6 **Test of Div B Incorrect Reachback Critical Device 2 Response with the ATF Chicane Magnet in the OFF state.**

☐	**VERIFY**	**CMSK** is set to	**OFF**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages **CM 1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
	P&H	At **encl 5805, ACMRA,** Div **B** S3 for **>10 secs**	
☐	**VERIFY**	**ACR** sees on Detls pge **Not Off Fault,** Div **B**	**FAULT**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Disabled IN**
	PRESS	At **encl 5806, CIB,** Div **B** Lsr Shtr **Test** button, till **Reachback**	
	PRESS	At **encl 5806, CIB,** Div **B** Mod 1 **Test** button till **Bad** reachback	
☐	**VERIFY**	**ACR** sees on Detls pge **Reachback** Div **B**	**Fault**

☐	**VERIFY**	**ACR** sees on Detls pge **Bad Reachback** Div **B**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** Reachback and Bad Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge: **Reachback** ☐ and **Bad Reachback** ☐	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**Attempt** to **Reset** Not Off **Fault**	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge **Not Off** Fault	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on Main pge **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on Main pge **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div B Incorrect Reachback Critical Device 2 Response with the ATF Chicane Magnet in the OFF state.**

1.7 Test of the ATF Chicane Magnet in the ON state and >10% fault for < and > 10 secs respectively.

	SET	Chicane Mode Selector Key (**CMSK**) at **ATF** Control Room (**ACR**) to **ON**	
☐	**VERIFY**	**CMSK** is set to	**ON**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW ON**: Div A ☐ and Div B ☐	**ON (Green)**
☐	**VERIFY**	Chicane Power Supplies (**CPS**) **1** ☐, **CPS2** ☐, **CPS3** ☐ and **CPS4** ☐ are	**OFF**
☐	**VERIFY**	**ACR** sees voltages for Chicane Magnet (**CM**) **1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	Primary ATF Critical Device (**CDEV_1**) [Laser shutter] is	**OUT**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	ATF Reachback Critical Device (**RHK_DV1**) [Modulator 1]☐ and **RHK_DV2** [Modulator2]☐ are	**OFF**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **>10% fault**	**OK (Blue)**
	AT	**Encl 5805,** ACS Chicane Magnet Readback Amplifiers (**ACMRA**), follow **Push-button** Tests in **Tables 4 thru 6** below	

P&H for <10 secs Div B P/B	Verify during P&H, for Div B, voltage for				Verify for Div B >10% Fault OK	Verify			Verify Audible Alarm OFF
	CM1 >0.5V	CM2 >0.5V	CM3 >0.5V	CM4 >0.5V		Cdev_1 Enab OUT	RHK_DV1 Enab OFF	RHK_DV2 Enab OFF	
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐

Table –4 Div B Test of Response to >10% Magnet voltage fault for <10 secs.

P&H Div A P/B for > 10secs	Verify during P&H, for Div A, voltage for				Verify for Div A >10% Fault Fault (Red)	Verify on Detls pge						Verify Alarm OFF	Cont'd on Table 6
						Cdev_1		Rhk_Dv1 Enab Off		Rhk_Dv2 Enab Off			
	CM1 >0.5V	CM2 >0.5V	CM3 >0.5V	CM4 >0.5V		Div A Disab In	Div B Enab In	Div A	Div B	Div A	Div B		
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Table–5 Div A Test of Response to >10% Magnet voltage fault for >10 secs.

Reset >10% fault	Verify voltage for				Verify for Div A >10% Fault OK	Verify on Detls pge							Verify Alarm OFF	Go to next switch in Table 5
	CM1 0 ± .5V	CM2 0 ± .5V	CM3 0 ± .5V	CM4 0 ± .5V		Cdev_1		Rhk_Dv1 Enab Off		Rhk_Dv2 Enab Off				
						Div A Enab Out	Div B Enab Out	Div A	Div B	Div A	Div B			
S1	☐	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S2	N/A	☐	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S3	N/A	N/A	☐	N/A	☐	☐	☐	☐	☐	☐	☐	☐	
S4	N/A	N/A	N/A	☐	☐	☐	☐	☐	☐	☐	☐	☐	**End of Test**

Table–6 Div A Test of Response to >10% Magnet voltage fault for >10 secs Continued.

☐　　**Check for acceptance of Test of the ATF Chicane Magnet in the ON state and >10% fault for < and > 10 secs respectively.**

1.8　Test of Div B Power-up

☐	**VERIFY**	**CMSK** is set to	**OFF**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW Off**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **>10% fault**	**OK**

	Turn OFF	**AC Power** to **Div B Field Rack PLC**	
☐	**VERIFY**	**AC Power** to **Div B Field Rack PLC** is	**TURNED OFF**
	WAIT	**30 Secs**	
	Turn ON	**AC Power** to **Div B Field Rack PLC**	
☐	**VERIFY**	**AC Power** to **Div B Field Rack PLC** is	**TURNED ON**

☐	**VERIFY**	**ACR** sees **CDEV_1**	**A<>B**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**A<>B**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **silence** Alarm	**SUCCESSFUL**

☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1**: Div **A**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1**: Div **B**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**

☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault**: Div **A**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault**: Div **B**	**Fault**

☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **A**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **B**	**Fault**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **A**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **B**	**Ng Cmms**
☐	**VERIFY**	**Attempt** to **clear** R I/O fault with **RHF**	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **clear** Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on **Detls** pge **R I/O Fault:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div **A** ☐ and Div **B** ☐	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐		**Check for acceptance of Test of Div B Power-up**	

1.9 **Test of Div A Ng RI/O with the ATF Chicane Magnet in the ON state.**

☐	**VERIFY**	**CMSK** is set to	**ON**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW ON**: Div **A** ☐ and Div B ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for Chicane Magnet **(CM) 1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
	REMOVE	**RI/O** from **Div A** Field rack **Module 6**	
☐	**VERIFY**	**ACR** sees **CDEV_1**	**A<>B**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**A<>B**
☐	**VERIFY**	**ACR** sees **Reachback** Div **A**	**nd**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** RI/O **fault** with **RHF**	**UNSUCCESSFUL**
	REPLACE	**RI/O** from **Div A** Field rack **Module 6**	
☐	**VERIFY**	**ACR** sees on **Detls** pge **RI/O Fault,** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1,** Div **A**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **CDEV_1,** Div **B**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Div A** Cmms	**Ng Cmms**

☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback** Div **A**	**Fault**
☐	**VERIFY**	**Attempt** to **Reset** Reachback	**UNSUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** RI/O **fault** with **RHF**	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on **Detls** pge **RI/O Fault**	**OK**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Cmms:** Div A ☐ and Div B ☐	**OK**
☐	**VERIFY**	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on **Detls** pge **Reachback:** Div A ☐ and Div B ☐	**OK**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div A Ng RI/O with the ATF Chicane Magnet in the ON state.**

1.10 Test of Div B Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the ON state.

☐	**VERIFY**	**CMSK** is set to	**ON**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW ON**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for: **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
	P&H	At **encl 5805, ACMRA,** Div **B** S1 for **>10 secs**	
☐	**VERIFY**	**ACR** sees on Detls pge **>10% Fault,** Div **B**	**FAULT**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Disabled IN**
	P&H	At **encl 5806, CIB,** Div **B** Laser Shutter **Test** button for **> 2secs**	
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback** Div **B**	**Fault**
☐	**VERIFY**	**Audio Alarm**	**OFF**
☐	**VERIFY**	**Attempt** to **Reset** >10% fault	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div B Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the ON state.**

1.11 Test of Div A Incorrect Reachback Critical Device 2 Response with the ATF Chicane Magnet in the ON state.

☐	**VERIFY**	**CMSK** is set to	**ON**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW ON**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages **CM 1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
	P&H	At **encl 5805, ACMRA,** Div **A S3** for **>10 secs**	
☐	**VERIFY**	**ACR** sees on Detls pge **>10% Fault,** Div **A**	**FAULT**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Enabled IN**
	PRESS	At **encl 5806, CIB,** Div **A** Lsr Shtr **Test** button, till **Reachback**	
	PRESS	At **encl 5806, CIB,** Div **A Mod** 2 **Test** button till **Bad** reachback	
☐	**VERIFY**	**ACR** sees on Detls pge **Reachback** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **Bad Reachback** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A**	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **B**	**Enabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	**VERIFY**	**Attempt** to **Reset** Reachback and Bad Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge: **Reachback** ☐ and **Bad Reachback** ☐	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**Attempt** to **Reset** >10% **Fault**	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge **>10%** Fault	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Enabled OUT**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div A Incorrect Reachback Critical Device 2 Response with**

the ATF Chicane Magnet in the ON state.

1.12   Test of Normal setup of the ATF Chicane Magnet with Chicane Mode Selector key (CMSK) set to Degauss

	SET	**CMSK** at **ATF** Control Room (**ACR**) to **Degauss**	
☐	**VERIFY**	**CMSK** is set to	**DEGAUSS**
☐	**VERIFY**	On Details Page **ACR** sees **Key SW Degauss**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for Chicane Magnet **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	Primary ATF Critical Device **CDEV_1** is	**INSERTED**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐   **Check for acceptance of Test of Normal setup of the ATF Chicane Magnet with the CMSK set to Degauss.**

1.13   Test of Div A Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the Degauss state.

☐	**VERIFY**	**CMSK** is set to	**DEGAUSS**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW Degauss**: Div **A** ☐ and Div **B** ☐	**ON**
☐	**VERIFY**	**ACR** sees voltages for: **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
	P&H	At **encl 5806, CIB,** Div **A** Laser Shutter **Test** button for **> 2secs**	
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback** Div **A**	**Fault**
☐	**VERIFY**	**Audio Alarm**	**OFF**
☐	**VERIFY**	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**

□   **VERIFY**   **ACR** sees **RHK_DV1** □ and **RHK_DV2** □ are   **Enabled OFF**

□   **Check for acceptance of Test of Div A Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the Degauss state.**

1.14   **Test of Div B Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the Degauss state.**

□	**VERIFY**	**CMSK** is set to	**DEGAUSS**
□	**VERIFY**	On Detls Pge **ACR** sees **Key SW Degauss**: Div A □ and Div B □	**ON**
□	**VERIFY**	**ACR** sees voltages for: **CM1** □**, CM2** □**, CM3** □ and **CM4** □ are	**0 ± .5 V**
□	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
□	**VERIFY**	**ACR** sees **RHK_DV1** □ and **RHK_DV2** □ are	**Enabled OFF**
□	**VERIFY**	**ACR** sees **Reachback**	**OK**
□	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div A □ and Div **B** □	**Disabled IN**
□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **A**	**Enabled OFF**
□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **B**	**Enabled OFF**

        P&H   At **encl 5806, CIB,** Div **B** Laser Shutter **Test** button for **> 2secs**

□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **A**	**Enabled OFF**
□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **B**	**Disabled OFF**
□	**VERIFY**	**ACR** sees **Reachback** Div **B**	**Fault**
□	**VERIFY**	**Audio Alarm**	**OFF**
□	**VERIFY**	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
□	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div A □ and Div **B** □	**Disabled IN**
□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **A**	**Enabled OFF**
□	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** □ and **RHK_DV2** □**,** Div **B**	**Enabled OFF**
□	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
□	**VERIFY**	**ACR** sees **RHK_DV1** □ and **RHK_DV2** □ are	**Enabled OFF**

□   **Check for acceptance of Test of Div B Incorrect Primary Critical Device Response with the ATF Chicane Magnet in the Degauss state.**

1.15   **Test of Div A Incorrect Reachback Critical Device 1 Response with the ATF Chicane Magnet in the Degauss state.**

□	**VERIFY**	**CMSK** is set to	**DEGAUSS**
□	**VERIFY**	On Detls Pge **ACR** sees **Key SW Degauss**: Div A □ and Div **B** □	**ON**
□	**VERIFY**	**ACR** sees voltages **CM1** □**, CM2** □**, CM3** □ and **CM4** □ are	**0 ± .5 V**
□	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**

☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**

	PRESS	At **encl 5806, CIB,** Div **A** Lsr Shtr **Test** button, till **Reachback**	
	PRESS	At **encl 5806, CIB,** Div **A Mod** 1 **Test** button till **Bad** reachback	

☐	**VERIFY**	**ACR** sees on Detls pge **Reachback** Div **A**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **Bad Reachback** Div **A**	**Fault**

☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**

☐	**VERIFY**	**Audio Alarm**	**ON**
☐	**VERIFY**	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**

☐	**VERIFY**	**Attempt** to **Reset** Reachback and Bad Reachback	**SUCCESSFUL**
☐	**VERIFY**	**ACR** sees on Detls pge: **Reachback** ☐ and **Bad Reachback** ☐	**OK**

☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**

☐	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div A Incorrect Reachback Critical Device 1 Response with the ATF Chicane Magnet in the Degauss state.**

1.16 **Test of Div B Incorrect Reachback Critical Device 2 Response with the ATF Chicane Magnet in the Degauss state.**

☐	**VERIFY**	**CMSK** is set to	**DEGAUSS**
☐	**VERIFY**	On Detls Pge **ACR** sees **Key SW Degauss**: Div **A** ☐ and Div **B** ☐	**ON**

☐	**VERIFY**	**ACR** sees voltages **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**

☐	**VERIFY**	**ACR** sees **CDEV_1**	**Disabled IN**
☐	**VERIFY**	**ACR** sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**
☐	**VERIFY**	**ACR** sees **Reachback**	**OK**
☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**

	PRESS	At **encl 5806, CIB,** Div **B** Lsr Shtr **Test** button, till **Reachback**	
	PRESS	At **encl 5806, CIB,** Div **B Mod** 1 **Test** button till **Bad** reachback	

☐	**VERIFY**	**ACR** sees on Detls pge **Reachback** Div **B**	**Fault**
☐	**VERIFY**	**ACR** sees on Detls pge **Bad Reachback** Div **B**	**Fault**

☐	**VERIFY**	**ACR** sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	**VERIFY**	**ACR** sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**

☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**
☐	VERIFY	**Audio Alarm**	**ON**
☐	VERIFY	**Attempt** to **Silence** Audio alarm	**SUCCESSFUL**
☐	VERIFY	**Attempt** to **Reset** Reachback and Bad Reachback	**SUCCESSFUL**
☐	VERIFY	ACR sees on Detls pge: **Reachback** ☐ and **Bad Reachback** ☐	**OK**
☐	VERIFY	ACR sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	VERIFY	ACR sees on Main pge **CDEV_1**	**Disabled IN**
☐	VERIFY	ACR sees on Main pge **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Div B Incorrect Reachback Critical Device 2 Response with the ATF Chicane Magnet in the Degauss state.**

1.17 **Test of Laser Shutter for Middle indication utilizing the Disabled In condition for the Magnet Degauss state.**

☐	VERIFY	**CMSK** is set to	**DEGAUSS**
☐	VERIFY	On Detls Pge **ACR** sees **Key SW Degauss**: Div **A** ☐ and Div **B** ☐	**ON**
☐	VERIFY	ACR sees voltages **CM1** ☐, **CM2** ☐, **CM3** ☐ and **CM4** ☐ are	**0 ± .5 V**
☐	VERIFY	ACR sees **CDEV_1**	**Disabled IN**
	P & H	At **encl 5806, CIB,** Div **A** & Div **B** Lsr Shtr **Test** buttons simultaneously	
☐	VERIFY	ACR sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled OUT**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Disabled OFF**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Disabled OFF**
☐	VERIFY	ACR sees on Main pge **CDEV_1**	**MIDDLE**
	RELEASE	Div **A** & Div **B** Lsr Shtr **Test** buttons	
☐	VERIFY	**Attempt** to **Reset** Reachback	**SUCCESSFUL**
☐	VERIFY	ACR sees on Detls pge **Reachback:** Div **A** ☐ and Div **B** ☐	**OK**
☐	VERIFY	ACR sees on Detls pge **CDEV_1:** Div **A** ☐ and Div **B** ☐	**Disabled IN**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **A**	**Enabled OFF**
☐	VERIFY	ACR sees on Detls pge **RHK_DV1** ☐ and **RHK_DV2** ☐, Div **B**	**Enabled OFF**
☐	VERIFY	ACR sees **CDEV_1**	**Disabled IN**
☐	VERIFY	ACR sees **RHK_DV1** ☐ and **RHK_DV2** ☐ are	**Enabled OFF**

☐ **Check for acceptance of Test of Laser Shutter for Middle indication utilizing the Disabled In condition for the Magnet Degauss state.**

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: _____/_____/_____

TTL: Sign for completion of final testing: _____

Date: _____/_____/_____